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California Regional Water Quality Control Board

Santa Ana Region

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Arnold Schwarzenegger
Governor

May 28, 2008

Steve Olo
City of Irvine
1 Civic Center Plaza
Irvine, CA 92606

CLEAN WATER ACT SECTION 401 WATER QUALITY STANDARDS CERTIFICATION FOR MAINTENANCE ACTIVITIES IN LANE CHANNEL, CITY OF IRVINE (ACOE REFERENCE NO. NOT AVAILABLE)

Dear Mr. Olo:

On October 22, 2007, we received an application for Clean Water Act Section 401 Water Quality Standards Certification (Certification), submitted on your behalf by Vandermost Consulting Services, Inc., for maintenance activities in Lane Channel in the City of Irvine. On January 18, 2008, Regional Board staff received a response to a request for additional information made on October 24, 2007. This letter responds to your request for certification that the proposed project, described in your application and summarized below, will comply with State water quality standards outlined in the Water Quality Control Plan for the Santa Ana River Basin (1995) and subsequent Basin Plan amendments:

Project Description: Routine and non-routine maintenance of a reconstructed 1,800-foot long reach of Lane Channel between State Route 55 and Main Street along MacArthur Boulevard¹. Maintenance activities involve application of herbicides to remove all vegetation within the Channel annually; excavating sediment and vegetation to maintain line and grade; and repair of existing structures. The project is located within Section 8 of Township 5 South, Range 9 West, of the U.S. Geological Survey *Tustin, California*, 7.5-minute topographic quadrangle map (33.7090796 degrees N/ -117.8581992 degrees W).

Receiving water: Lane Channel.

¹ See Certification dated July 12, 2004, authorizing discharges related to the conversion of Lane Channel to a soft-bottom channel with vertical concrete banks.



Fill area: up to 0.91 acres of perennial (wetland) flood control channel (1,800 linear feet)

Dredge/Fill volume: N/A

Federal permit: U.S. Army Corps of Engineers Nationwide Permit No. 3

On July 12, 2004, a Certification was issued for physical modification of Lane Channel and for impacts to its physical and biological integrity. Impacts to the chemical integrity of Lane Channel and downstream receiving waters are being addressed through compliance with the conditions of the July 12, 2004 Certification. The proposed maintenance activities do not constitute new, un-mitigated impacts. Therefore, no new compensatory mitigation is needed for the issuance of this Certification.

The application of pesticides may be subject to State Water Resources Control Board Order No. 2004-0009-DWQ, Statewide General National Pollutant Discharge Elimination System (NPDES) Permit for the Discharge of Aquatic Pesticides for Aquatic Weed Control in Waters of the United States, General Permit No. CAG990005 (State Board Order No. 2004-0009-DWQ). For more information, please review State Board Order No. 2004-0009-DWQ at www.swrcb.ca.gov/aquatic/index.html.

Order No. R8-2002-0010, NPDES Permit No. 618030, commonly known as the Orange County Urban Storm Water Runoff Permit, includes Provision XIV.2., which states:

"By July 1, 2003, the permittees shall complete an assessment of their flood control facilities to evaluate opportunities to configure and/or to reconfigure channel segments to function as pollution control devices and to optimize beneficial uses. These modifications may include in-channel sediment basins, bank stabilization, water treatment wetlands, etc. This shall be reported in the 2002-2003 annual report."

"Configure" and "reconfigure", as used in Provision XIV.2., describe the physical form of a channel segment as it relates to the channel bed and banks, the roughness of those surfaces (i.e. rip-rap, earthen, etc.) and the vegetative structure and density within the channel. Because vegetation within a channel also affects its roughness and, therefore, its hydraulic capacity, maintenance is often needed to remove excessive vegetation and thereby affect beneficial uses. Because of the interrelationship between channel maintenance and the configuration of vegetation within the channel, Provision XIV.2. requires consideration of both the construction of the channel and the manner in which it is maintained.

Lane Channel has been designed to accommodate a roughness coefficient of 0.04, which will allow the growth of herbaceous vegetation without compromising the hydraulic capacity of the Channel. However, maintenance practices involve the removal of nearly all vegetation within the channel on a periodic basis, prior to the start of the rain season, resulting in a roughness coefficient that is significantly less than 0.04 immediately after maintenance work has been completed. In effect, this causes the channel roughness to be cyclical, peaking during the dry season, and being at its lowest just prior to the rain season when flood capacity is most needed.

This approach minimizes the number of maintenance intervals in a given year, minimizes the costs of maintaining the overall flood control system, allows maintenance of the overall system to occur within a time period that minimizes impacts to migratory birds, and reduces the exposure of maintenance personnel and equipment to potential swift-water hazards during the rain season. If maintenance were to occur in a manner that allowed a 0.04 roughness coefficient to exist year round, vegetative growth rates would necessitate a much more frequent maintenance interval at elevated costs, increased impacts to migratory birds, and substantial risk to maintenance personnel and equipment.

Should the proposed project impact state- or federally-listed endangered species or their habitat, implementation of measures identified in consultation with U.S. Fish and Wildlife Service and the California Department of Fish and Game will ensure those impacts are mitigated to an acceptable level. Appropriate Best Management Practices will be implemented to reduce construction-related impacts to Waters of the State according to the requirements of Order No. R8-2002-0010. Order No. R8-2002-0010 requires that you substantially comply with the requirements of State Water Resources Control Board's General Permit for Storm Water Discharges Associated with Construction Activity, Water Quality Order 99-08 DWQ, including the preparation of a SWPPP.

You have applied for a Nationwide Permit from the U.S. Army Corps of Engineers in compliance with Section 404 of the Clean Water Act. You have applied for a Streambed Alteration Agreement with the California Department of Fish and Game. Pursuant to the California Environmental Quality Act (CEQA), the City of Irvine adopted a Mitigated Negative Declaration (MND) for the reconfiguration of the subject reach of Lane Channel on September 26, 2001. The Executive Officer has considered the City's MND in the issuance of this Certification.



This 401 Certification is contingent upon the execution of the following conditions:

1. Project activities must not depress the dissolved oxygen content of receiving waters below 5 mg/L as a result of controllable water quality factors. When natural dissolved oxygen content is less than 5 mg/L, the discharger must not cause further depression.
2. Project activities must not raise the pH of receiving waters above 8.5 or lower pH below 6.5 as the result of controllable water quality factors.
3. Project-related activities shall not cause the background natural turbidity, as measured in Nephelometric Turbidity Units (NTUs), in receiving waters to be increased by values greater than the following Basin Plan objectives at a distance of 100 feet from the activity:
 - a. If natural turbidity is between 0 and 50 NTU, the maximum increase shall not exceed 20% of the measured natural turbidity.
 - b. If natural turbidity is 50 to 100 NTU, the increase shall not exceed 10 NTU.
 - c. If natural turbidity is greater than 100 NTU, the maximum increase shall not exceed 10% of the measured natural turbidity.
4. An effective monitoring plan must be developed and implemented to document compliance with conditions 1, 2, and 3 above. Any suspected violation of these conditions must be reported to Regional Board staff in writing within 24-hours of discovery. The monitoring plan and records of monitoring activities must be maintained on site for the duration of work and be available for inspection upon request.
5. This Certification and any subsequent amendments shall be maintained on site for the duration of the work and be available for inspection upon request.
6. This Certification is transferable only upon written notice to the Executive Officer. The notice must include written acknowledgement of this Certification by the transferee's authorized representative.
7. This Certification is applicable to the maintenance activities described above until May 31, 2013 but may be extended by the Executive Officer upon receipt of a written request.

Under California Water Code, Section 1058, and Pursuant to 23 CCR §3860, the following shall be included as conditions of all water quality certification actions:

- (a) Every certification action is subject to modification or revocation upon administrative or judicial review, including review and amendment pursuant to Section §13330 of the Water Code and Article 6 (commencing with Section 3867) of this Chapter.



- (b) Certification is not intended and shall not be construed to apply to any activity involving a hydroelectric facility and requiring a FERC license or an amendment to a FERC license unless the pertinent certification application was filed pursuant to Subsection §3855(b) of this Chapter and that application specifically identified that a FERC license or amendment to a FERC license for a hydroelectric facility was being sought.
- (c) Certification is conditioned upon total payment of any fee required under this Chapter and owed by the applicant.

Although we anticipate no further regulatory involvement, if the above stated conditions are changed, any of the criteria or conditions as previously described are not met, or new information becomes available that indicates a water quality problem, we may formulate Waste Discharge Requirements.

In the event of any violation or threatened violation of the conditions of this certification, the violation or threatened violation shall be subject to any remedies, penalties, process or sanctions as provided for under state law. For purposes of section 401(d) of the Clean Water Act, the applicability of any state law authorizing remedies, penalties, process or sanctions for the violation or threatened violation constitutes a limitation necessary to assure compliance with the water quality standards and other pertinent requirements incorporated into this certification.

In response to a suspected violation of any condition of this certification, the Santa Ana Regional Water Quality Control Board (Regional Board) may require the holder of any permit or license subject to this certification to furnish, under penalty of perjury, any technical or monitoring reports the Regional Board deems appropriate. The burden, including costs, of the reports shall be reasonable in relation to the need for the reports and the benefits to be obtained from the reports.

In response to any violation of the conditions of this certification, the Regional Board may add to or modify the conditions of this certification as appropriate to ensure compliance. Pursuant to California Code of Regulations Section 3857, we will take no further action on your application. Please notify our office five (5) days before construction begins on this project.

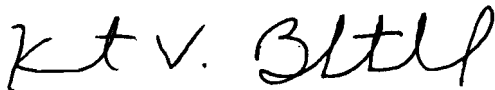
This letter constitutes a Water Quality Standards Certification issued pursuant to Clean Water Act Section 401. I hereby issue an order certifying that any discharge from the referenced project will comply with the applicable provisions of Sections 301 (Effluent Limitations), 302 (Water Quality Related Effluent Limitations), 303 (Water Quality Standards and Implementation Plans), 306 (National Standards of Performance), and 307 (Toxic and Pretreatment Effluent Standards) of the Clean Water Act, and with other



applicable requirements of State law. This discharge is also regulated under State Water Resources Control Board Order No. 2003-0017-DWQ (Order No. 2003-0017-DWQ), "General Waste Discharge Requirements for Dredge and Fill Discharges That Have Received Water Quality Certification" which requires compliance with all conditions of this Water Quality Standards Certification. Order No. 200-0017-DWQ is available at www.swrcb.ca.gov/resdec/wqorders/2003/wqo/wqo2003-0017.pdf

Should there be any questions, please contact Adam Fischer at (951) 320-6363, or Mark Adelson at (951) 782-3234.

Sincerely,



for GERARD J. THIBEAULT
Executive Officer

cc (via electronic mail):

U. S. Army Corps of Engineers, Los Angeles Office – Forrest Vanderbilt
State Water Resources Control Board, OCC – David Rice
State Water Resources Control Board, DWQ-Water Quality Certification Unit –
Bill Orme
California Department of Fish and Game, Ontario Office – Jeff Brandt
U.S. EPA, Supervisor of the Wetlands Regulatory Office WTR- 8 – Eric Raffini
and David Smith

APF:401/certifications/lane channel maint 302007-23

